

Refine Search

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Search Results -

Terms	Documents
L16 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	11

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

L17

Refine Search

Recall Text

Clear

Interrupt

Search History

DATE: Monday, February 20, 2006 [Printable Copy](#) [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
<u>L17</u>	L16 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	11	<u>L17</u>
<u>L16</u>	11 and (voice\$ with recogni\$) and (voice\$ with synthesi\$)	51	<u>L16</u>
<u>L15</u>	113 and L14	2	<u>L15</u>
<u>L14</u>	L12 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	2	<u>L14</u>
	DB=PGPB,USPT; THES=ASSIGNEE; PLUR=YES; OP=OR		
<u>L13</u>	L12 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$) and (terminat\$ or stop\$)	2	<u>L13</u>
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR		
<u>L12</u>	18 or 19 or 110 or 111	22	<u>L12</u>

DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR

L11 (5864771 | 6009355 | 6144318 | 6115668 | 5177685 | 6075467 | 5699056 | 6154123 | 6101443 | 6092005)! [PN] 10 L11

DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR

L10 ('6351698')[ABPN1,NRPN,PN,TBAN,WKU] 2 L10

L9 ('6351698')[URPN] 10 L9

L8 l6 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$) 1 L8

L7 L6 and (terminat\$ or stop\$) 3 L7

L6 L5 and (interacti\$ with communicat\$) 4 L6

L5 L4 and (map\$ or navigat\$) 32 L5

L4 l1 and (l2 or L3) 32 L4

L3 (voice\$ with recogni\$) and (voice\$ with synthesi\$) and @pd<=20010423 2151 L3

L2 (voice\$ with recogni\$) and (voice\$ with synthesi\$) and @ad<=20010423 3246 L2

L1 701/211.ccls. 985 L1

END OF SEARCH HISTORY

[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

Generate Collection

Print

L13: Entry 1 of 2

File: USPT

Jul 8, 2003

DOCUMENT-IDENTIFIER: US 6591168 B2

TITLE: System and method for adaptable mobile user interface

Detailed Description Text (4):

FIG. 2 illustrates a preferred process performed by system 20. At block 60, system 20 and, more specifically, processor 32, receives presentation content. The presentation content is preferably received at communications device 36 from a server transmitted over a network (not shown). At decision block 62, processor 32 determines if any vehicle emergency condition exists based on information received from the other vehicle systems. If processor 32 determines that a vehicle emergency condition exists, processor 32 stops all output of received presentation content to any one of the components of user interface 22 (block 64). Examples of a vehicle emergency condition that may cause the processor to stop output presentation content to user interface 22 are signals received from the engine that indicate engine overheating or a signal that indicates the operator has applied brakes to the point where an anti-braking system is activated.

Detailed Description Text (5):

If, at decision block 62, processor 32 determines that there is not a vehicle emergency condition, processor 32 receives vehicle condition information (block 66). The vehicle condition information comes from a number of sources that generate signals, such as GPS 34 or a speedometer. At block 68, processor 32 outputs presentation content through user interface 22 based on the vehicle condition information. This step involves determining the substance and format of the presentation content to display on display 26 or broadcast on speakers 28 of user interface 22. For example, when the vehicle is parked, processor 32 presents all or nearly all of the received presentation content. As the vehicle condition changes, for example, the vehicle picks up speed, processor 32 changes the presentation content information that is shown on display 26. The change in presentation content may also involve shifting presentation of information from visual display to audio broadcast as output through speakers 28. In one example, the presented content is a full detailed map of the vehicle's location that includes directions to a previously requested destination. Based on the vehicle speed, or the rate of change in vehicle speed or direction, the detail shown on the map will be altered. As the vehicle speed increases, the detail shown on the map is reduced, for example, to include only the vehicle's present location in relation to nearby streets or intersections. Some or all of the presentation content, or map directions, may be translated to audio format and broadcast to the vehicle operator via speakers 28. In other examples, change in vehicle condition may result in alteration of the font or size of text, icons and graphics presented on the display, as well as increased or decreased audio broadcast. FIG. 3 illustrates an example, based on vehicle speed, of how processor 32 changes the output that is presented over user interface 22.

Detailed Description Text (7):

FIG. 3 illustrates an example of the process performed at block 68 of FIG. 2. At block 80, vehicle speed information is determined, for example by reference to the vehicle speedometer. If the vehicle's speed is less than or equal to 25 mph, processor 32 generates a detailed display to present on display 26 of user interface 22 (block 82). As the speed of the vehicle increases, the amount of

detailed visual information generated for display is reduced. Thus, if the vehicle speed is greater than 25 mph but less than or equal to 40 mph, processor 32 generates a display with less visual information than was generated for vehicle speeds of less than or equal to 25 mph (block 84). When the speed is greater than 40 mph but less than or equal to 70 mph, processor 32 reduces not only the amount of detail to be displayed on display 26, but also increases the font size of any text included in the displayed presentation content and changes the color to make it easier for an operator to view (block 86). When the speed is greater than 70 mph, processor 32 stops generating display information for presentation on display 26 and switches to a pure audio presentation for output over the speakers 28 (block 88). The specific speed ranges described are exemplary only. The exact trigger speeds may vary according to various factors, such as road conditions, vehicle specification, vehicle operator skill, etc., as well as user preference. Likewise, the output format of the presentation content may be varied according to user interface hardware or software constraints as well as user preference.

US Reference Patent Number (19):
6351698

[Previous Doc](#)

[Next Doc](#)

[Go to Doc#](#)

Hit List

First Hit

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Search Results - Record(s) 1 through 10 of 11 returned.

☐ 1. Document ID: US 20020065606 A1

Using default format because multiple data bases are involved.

L17: Entry 1 of 11

File: PGPB

May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020065606

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020065606 A1

TITLE: Navigation apparatus and communication base station, and navigation system and navigation method using same

PUBLICATION-DATE: May 30, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Kawai, Tomoyuki	Nara		JP
Maeda, Kengo	Nara		JP

US-CL-CURRENT: 701/211; 340/988

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
----------------------	-----------------------	--------------------------	-----------------------	------------------------	--------------------------------	----------------------	---------------------------	---------------------------	-----------------------------	------------------------	---------------------	------------------------

☐ 2. Document ID: US 6587786 B1

L17: Entry 2 of 11

File: USPT

Jul 1, 2003

US-PAT-NO: 6587786

DOCUMENT-IDENTIFIER: US 6587786 B1

TITLE: Sensor free vehicle navigation system utilizing a voice input/output interface for routing a driver from his source point to his destination point

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
----------------------	-----------------------	--------------------------	-----------------------	------------------------	--------------------------------	----------------------	---------------------------	---------------------------	-----------------------------	------------------------	---------------------	------------------------

☐ 3. Document ID: US 6529826 B2

L17: Entry 3 of 11

File: USPT

Mar 4, 2003

US-PAT-NO: 6529826
DOCUMENT-IDENTIFIER: US 6529826 B2

TITLE: Navigation apparatus and communication base station, and navigation system
and navigation method using same

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	----------

☐ 4. Document ID: US 6401029 B1

L17: Entry 4 of 11

File: USPT

Jun 4, 2002

US-PAT-NO: 6401029
DOCUMENT-IDENTIFIER: US 6401029 B1

TITLE: Assist device in designation of destination

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	----------

☐ 5. Document ID: US 6351698 B1

L17: Entry 5 of 11

File: USPT

Feb 26, 2002

US-PAT-NO: 6351698
DOCUMENT-IDENTIFIER: US 6351698 B1

TITLE: Interactive vehicle control system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	----------

☐ 6. Document ID: US 6208932 B1

L17: Entry 6 of 11

File: USPT

Mar 27, 2001

US-PAT-NO: 6208932
DOCUMENT-IDENTIFIER: US 6208932 B1
** See image for Certificate of Correction **

TITLE: Navigation apparatus

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	----------

☐ 7. Document ID: US 5928308 A

L17: Entry 7 of 11

File: USPT

Jul 27, 1999

US-PAT-NO: 5928308
DOCUMENT-IDENTIFIER: US 5928308 A
** See image for Certificate of Correction **

TITLE: Navigation system for vehicles

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	---------

☐ 8. Document ID: US 5903228 A

L17: Entry 8 of 11

File: USPT

May 11, 1999

US-PAT-NO: 5903228

DOCUMENT-IDENTIFIER: US 5903228 A

TITLE: Map information display apparatus and traveling route display apparatus and route guidance apparatus for moving body

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	---------

☐ 9. Document ID: US 5729109 A

L17: Entry 9 of 11

File: USPT

Mar 17, 1998

US-PAT-NO: 5729109

DOCUMENT-IDENTIFIER: US 5729109 A

TITLE: Navigation system and intersection guidance method

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	---------

☐ 10. Document ID: US 5592389 A

L17: Entry 10 of 11

File: USPT

Jan 7, 1997

US-PAT-NO: 5592389

DOCUMENT-IDENTIFIER: US 5592389 A

TITLE: Navigation system utilizing audio CD player for data storage

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	---------

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

Terms

Documents

L16 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)

11

Display Format: -

Change Format

Hit List

First Hit

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 11 through 11 of 11 returned.

☐ 11. Document ID: US 5406492 A

Using default format because multiple data bases are involved.

L17: Entry 11 of 11

File: USPT

Apr 11, 1995

US-PAT-NO: 5406492

DOCUMENT-IDENTIFIER: US 5406492 A

TITLE: Directional voice-type navigation apparatus

DATE-ISSUED: April 11, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Suzuki; Seiichi	Tokyo			JP

US-CL-CURRENT: 701/211; 340/996, 381/86, 701/209

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	2153	Claims	KMC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	-----------	------	--------	-----	----------

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
-------	---------------------	-------	----------	-----------	---------------

Terms	Documents
L16 and ((switch\$ or chang\$) with (voice\$ or audio\$) with output\$)	11

Display Format:

[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)

Hit List

First Hit

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6535743 B1

Using default format because multiple data bases are involved.

L6: Entry 1 of 4

File: USPT

Mar 18, 2003

US-PAT-NO: 6535743

DOCUMENT-IDENTIFIER: US 6535743 B1

TITLE: System and method for providing directions using a communication network

DATE-ISSUED: March 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kennedy, III; William C.	Dallas	TX		
Beasley; Dale E.	Flower Mound	TX		
Parker; Terry S.	Monticello	IN		
Russell; Thomas D.	Plano	TX		
Wortham; Larry C.	Garland	TX		
Saunders; William C.	Dallas	TX		

US-CL-CURRENT: 455/456.1; 340/988, 701/208, 701/209, 701/211

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	----------	--------	------	---------

☐ 2. Document ID: US 6351698 B1

L6: Entry 2 of 4

File: USPT

Feb 26, 2002

US-PAT-NO: 6351698

DOCUMENT-IDENTIFIER: US 6351698 B1

TITLE: Interactive vehicle control system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	KWIC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	----------	--------	------	---------

☐ 3. Document ID: US 6108604 A

L6: Entry 3 of 4

File: USPT

Aug 22, 2000

US-PAT-NO: 6108604

DOCUMENT-IDENTIFIER: US 6108604 A

TITLE: Vehicular navigation system and storage medium

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Abstracts	Claims	KWIC	Drawings
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-----------	--------	------	----------

☐ 4. Document ID: US 5948040 A

L6: Entry 4 of 4

File: USPT

Sep 7, 1999

US-PAT-NO: 5948040

DOCUMENT-IDENTIFIER: US 5948040 A

TITLE: Travel reservation information and planning system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstracts	Abstracts	Claims	KWIC	Drawings
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-----------	--------	------	----------

Terms	Documents
L5 and (interacti\$ with communicat\$)	4

Display Format: [Previous Page](#)[Next Page](#)[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

End of Result Set



Generate Collection

Print

L8: Entry 1 of 1

File: USPT

Feb 26, 2002

US-PAT-NO: 6351698

DOCUMENT-IDENTIFIER: US 6351698 B1

TITLE: Interactive vehicle control system

DATE-ISSUED: February 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kubota; Tomoki	Tokyo-to			JP
Hori; Koji	Tokyo-to			JP
Mazda; Manabu	Chiba-ken			JP
Adachi; Kazuhide	Tokyo-to			JP
Mukai; Kouji	Tokyo-to			JP

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Kabushikikaisha Equos Research				JP	03

APPL-NO: 09/492520 [\[PALM\]](#)

DATE FILED: January 27, 2000

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	11-021481	January 29, 1999

INT-CL-ISSUED: [07] [G08 G 1/09](#), [G08 G 1/123](#), [G06 F 17/00](#)

US-CL-ISSUED: 701/51; 701/209, 701/211, 340/988

US-CL-CURRENT: [701/51](#); [340/988](#), [701/209](#), [701/211](#)

FIELD-OF-CLASSIFICATION-SEARCH: 701/51, 701/1, 701/72, 701/117, 701/209, 701/211, 340/996, 340/438, 340/457, 340/460, 340/461, 340/490, 340/504, 340/505, 340/573, 340/988, 340/436, 340/576, 340/439, 340/815.4

See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

Clear

PAT-NO

ISSUE-DATE

PATENTEE-NAME

US-CL

<input type="checkbox"/> <u>5177685</u>	January 1993	Davis et al.	364/443
<input type="checkbox"/> <u>5699056</u>	December 1997	Yoshida	340/905
<input type="checkbox"/> <u>5864771</u>	January 1999	Yokoyama et al.	701/208
<input type="checkbox"/> <u>6009355</u>	December 1999	Obradovich et al.	701/1
<input type="checkbox"/> <u>6075467</u>	June 2000	Ninagawa	340/995
<input type="checkbox"/> <u>6092005</u>	July 2000	Okada	701/1
<input type="checkbox"/> <u>6101443</u>	August 2000	Kato et al.	701/210
<input type="checkbox"/> <u>6115668</u>	September 2000	Kaneko et al.	701/207
<input type="checkbox"/> <u>6144318</u>	November 2000	Hayashi et al.	340/995
<input type="checkbox"/> <u>6154123</u>	November 2000	Kleinberg	340/436

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	CLASS
9-14957	January 1997	JP	
9-159473	June 1997	JP	

ART-UNIT: 3661

PRIMARY-EXAMINER: Nguyen; Tan

ASSISTANT-EXAMINER: Tran; Dalena

ATTY-AGENT-FIRM: Lorusso & Loud

ABSTRACT:

An interactive navigation system includes a navigation processing unit, a current position sensor, a speaker, a microphone and a display. When it is preliminary inferred, based on receipt of a detection signal from the sensor, that a vehicle has probably been diverted from a drive route determined by the navigation processing unit, a machine voice question is produced through the speaker for confirmation of the inferred probability of diversion. A driver or user in the vehicle answers the question, which is input through the microphone and analyzed to be affirmative or negative, from which a final decision is made as to the vehicle diversion. In a preferred embodiment the question is spoken by a personified agent who appears on the display. The agent's activities are controlled by an agent processing unit. Communication between the agent and the user improves reliability and accuracy of inference of any vehicle condition which could not be determined perfectly by a sensor only.

14 Claims, 14 Drawing figures

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)